



## Takoma Park City Council Meeting – January 22, 2020 Agenda Item 5

### Work Session

Discuss Proposed Resolution Declaring Creation of the “2020 Climate Emergency Response Act – From Nuclear Free to Fossil Fuel Free to Build a Healthy and Livable Community for All”

### Recommended Council Action

Consider and discuss this draft resolution that lays out what is needed to reduce greenhouse gases by 100% in Takoma Park and identifies elements that would need to be addressed by a series of ordinances and Code changes to be considered by the Council in the future.

### Context with Key Issues

On March 13, 2019 City Council declared a climate emergency, recognizing that we are in an emergency state with devastating consequences for inaction. Trends for our region include more frequent and more severe weather events, continued increases in annual rainfall, and more frequent and prolonged stretches of extreme heat. These changes inflict substantial and catastrophic damage to our physical, social, and economic well-being. Takoma Park is taking the steps necessary to address this challenge locally by utilizing best practices. The City will also need to model new solutions in order to meet its goal of 100% reduction in greenhouse gas emissions city-wide by 2035.

In response to the climate emergency declaration, the Sustainability Manager was directed to:

- Accelerate an update of the Sustainable Energy Action Plan and greenhouse gas (GHG) inventory for all sectors of the City;
- Identify the most aggressive local actions the City's authority and resources will allow, along with cost estimates and benefits of these actions; and
- Identify what steps the City can take to move rapidly toward net zero greenhouse gas emissions by 2035, including near term implementation steps and achievable interim goals and dates.

The climate emergency declaration specifies a focus on dramatically improving efficiency of all our buildings (single family, multifamily, commercial and institutional), as well as a transition to renewable energy in electricity and heating/cooling.

The following recommendations provide the necessary agenda to reduce GHG 100%. They were developed through a robust community engagement process that included a webinar, public workshop, tabling at local events, online resident survey, and small group neighborhood meetings across the city; input from the City's Committee on the Environment; the work of the Cadmus Group; an extensive examination of leading policies around the country; participation in a national policy development collaboration cohort led by the Rocky Mountain Institute; expert advice and custom research reports; and information sharing through the Urban Sustainability Director's Network.

These recommendations are designed to coordinate with Montgomery County as they develop their climate actions. **The recommendations in the Resolution require Code changes and/or**

## **ordinances that would come before the City Council for consideration in the months and years ahead.**

Recognizing that once adopted by the Council through Code amendments or ordinances these recommended provisions are significant changes that will affect the entire community, the Resolution that lays out the overview for these changes will be:

- Presented on January 22
- Discussed again in work session on January 29
- The subject of a public hearing before the City Council on February 5
- Considered for adoption by the Council on February 12.

As the various implementing Code changes and ordinances are drafted over the coming years, each implementing action will involve public comment and Council consideration as well.

### **Council Priority**

Environmentally Sustainable Community

### **Environmental Considerations**

Greenhouse gas emissions, sustainability, energy efficiency

### **Fiscal Considerations**

Fiscal impacts of climate change include declining economic resiliency; short and long term budget impacts of more frequent and more severe weather events; increased health costs due to climate change; lost economic productivity and tax revenue.

Direct budget implications are estimated to be:

FY 21 increase in sustainability budget of \$25,000

FY 22 additional full-time sustainability staff member added, or contractor equivalent

Establishment of a “Sustainability Assistance Reserve Fund” and allocation of funds for that reserve fund to assist in paying for sustainability improvements for low to moderate income home and business owners.

Actions taken to make Takoma Park more climate change resilient and energy efficient may encourage investment in Takoma Park. Actions taken to make homes and other buildings more energy efficient can lower utility costs for owners and renters.

### **Racial Equity Considerations**

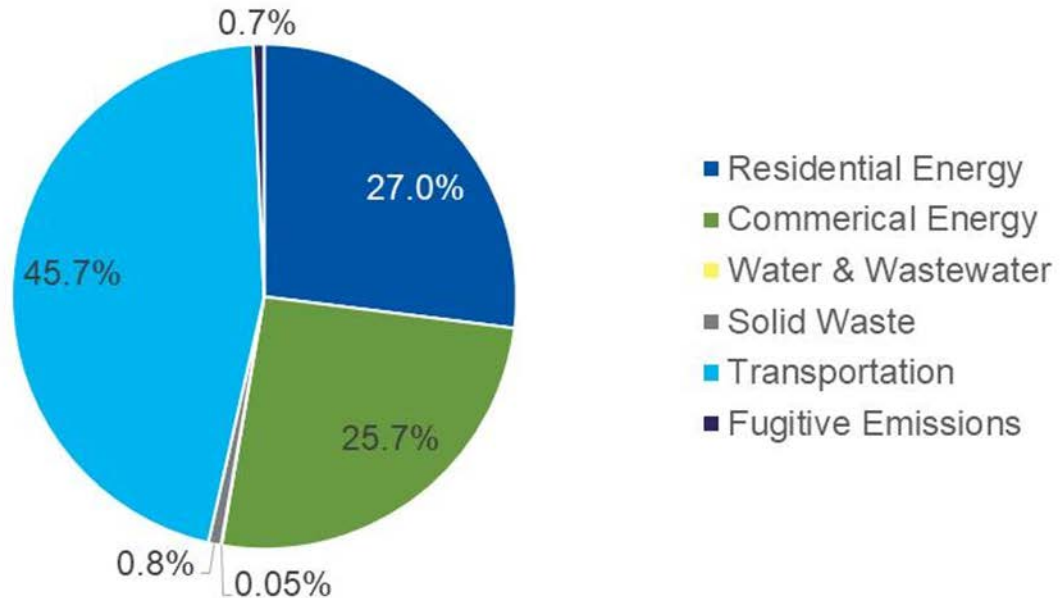
Communities most vulnerable to climate impacts tend to be the least prepared to manage and recover from the physical, economic, mental, and social devastation climate change can cause. Children, the elderly, indigenous peoples, and those with preexisting health conditions are especially vulnerable to climate disruptions such as flooding, dangerous heat, drought, and poor air quality. This is particularly true if they live in low-income communities, which often are exposed to multiple environmental hazards, yet are least likely to have resources or connections to address the cumulative impacts of environmental exposures that are worsened by climate change. (*American Journal of Public Health*)

### **Attachments and Links**

Draft Resolution Declaring Creation of the “2020 Climate Emergency Response Act – From Nuclear Free to Fossil Fuel Free to Build a Healthy and Livable Community for All”

# Total Emissions by Source Sector

City of Takoma Park, 2017



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CADMUS

## Key Components of the Climate Emergency Response Act

**Non-Residential Buildings:** Buildings 1,000 square feet or more will be required to benchmark using EnergyStar Portfolio Manager beginning January 1, 2021, and complete their benchmarking no later than December 31, 2025. Portfolio Manager is free to use. Exemptions for building types and sizes not found in Portfolio Manager may be considered as well as other potentially necessary exemptions.

The data collected from benchmarking will be used to establish a minimum energy efficiency standard. Buildings will need to meet this minimum standard no later than December 31, 2029. Available resources include Pepco rebate program, Energy Saving Companies that perform energy and water saving work with no upfront cost, and the Montgomery County Green Bank. Exemptions will need to be defined and considered.

*Precedents:* Montgomery County has mandated benchmarking for several years for large commercial properties. The county is now planning to pursue minimum energy efficiency standards. DC passed a law requiring benchmarking and minimum energy efficiency standards, as has New York City. Takoma Park would likely be first in nation to require benchmarking and standards for buildings down to 1,000 square feet.

**Multifamily Buildings Benchmarking and Standards:** Buildings with 20 or more units will be required to benchmark using EnergyStar Portfolio Manager beginning January 1, 2021, and complete their benchmarking no later than December 31, 2025. This affects an estimated 34 buildings. Portfolio Manager is free to use.

The data collected from benchmarking will be used to establish a minimum energy efficiency standard. Buildings will need to meet this minimum standard no later than December 31, 2029. Available resources include Pepco rebate program, Energy Saving Companies that perform energy and water saving work with no upfront cost, and the Montgomery County Green Bank. Exemptions will need to be defined and considered.

*Precedents:* Montgomery County is likely to expand its benchmarking law for large commercial buildings to very large multifamily buildings, and Boulder, CO has minimum energy efficiency standards in place for all rental units.

**Single family homes Home Energy Score and Standards:** Homes listed for sale will be required to have a Home Energy Score (HES) with a Comprehensive Home Energy Audit at the time of listing on the MLS beginning January 1, 2021. All homes in the city will be required to have a HES with a Comprehensive Home Energy Audit no later than December 31, 2025. Current estimates for the cost are \$150 – \$200 per home. Subsidies based on income, and exemptions for specific circumstances will be necessary to ensure equity concerns are addressed. Quality assurance will be conducted through the HES program, and local contractor education programs will be necessary.

The data collected will be used to establish a minimum HES for all homes. Homes will need to meet this minimum standard no later than December 31, 2029. It is estimated the cost to meet the minimum will be \$1,500 - \$4,000 for the lowest performing 15% of homes. Subsidies and grants are currently already available for energy efficiency improvements for low income home owners. Further assistance and exemptions will need to be considered.

*Precedents:* Berkeley, Portland, and several other cities already require a HES at time of real estate transaction or listing. HES is a Department of Energy program, and home energy labeling has been well studied. Making it mandatory for all homes with a pathway to require a minimum score would be a first in the nation program.

**LED Upgrades:** ALL residential rental units in Takoma Park, as well as commercial, and non-residential buildings must upgrade their lighting to LED no later than December 31, 2022. Acceptable LEDs must be 3,000K or below unless otherwise specifically exempted (example may be medical lighting or laboratory), with appropriate directional shielding. Where appropriate, timers and motion sensors should be installed. Typical payback is 1 – 2 years, with subsidies available from Pepco, and lighting contractors who will perform the upgrade at no upfront cost. Personal lamps belonging to residents in rental units would be exempted.

*Precedent:* New York City is requiring all large buildings, including multifamily, to upgrade to LED by 2025.

### **Transportation:**

1. All multifamily residential buildings with a parking lot will be required to provide standard outlets for EV vehicle charging by December 31, 2022. The number of outlets will be based on the number of parking spots, for example one outlet for each ten parking spaces or fraction thereof. The cost of charging will be allowed to be passed on to the vehicle owner via credit card reader, monthly fee, or

other mechanism.

2. The City Right of Way Permit provisions will be expanded to allow curbside placement of EV charging equipment on residential streets for residents who do not have off-street parking. The cost of installation and operation would be the responsibility of the applicant. In accordance with County law, any electric vehicle would be allowed to park in front of a charging station, however if an official sign is installed, any non-electric vehicle blocking a station may be ticketed. Further detail is available in the Charging in the Public Right of Way fact sheet.

*Precedents:* Tacoma, WA has piloted a ROW permit for charging equipment, no applicants yet. DC is currently working on a similar permit. Takoma Park already has one applicant in the queue ready for it to be officially available.

3. Full implementation of the County Bikeways Plan within the city.

4. Install at minimum 12 new bus shelters to encourage more use of public transportation no later than December 31, 2022.

5. Encourage plans to reduce the number of personal vehicles.

**Solid Waste:** The City will formally request additional capacity at the Prince George's Food Waste Processing Facility, prepare ordinance mandating food waste composting if and when capacity is guaranteed. As with recycling, the City would collect from single family homes and small rental buildings of 12 units or less, and commercial and multifamily buildings would be required to contract with a waste hauling company to collect their food scraps. Expected budget includes one additional full-time sanitation staff at \$70,000 annually and an additional collection vehicle at a cost of \$80,000. Cost to commercial and multifamily properties TBD.

*Precedent:* San Francisco has required food waste composting since 2009.

**Lawn Equipment:** All fossil fuel-based lawn care equipment operating in the city will be phased out by 2030. This will need to be phased out slowly with voluntary incentive programs between 2020 – 2030. Beginning in 2030 all private and commercial equipment must be electric or non-powered. Exemptions will be necessary.

*Precedents:* Dozens of cities, including DC, have banned gas leaf blowers. California is exploring banning gas mowers.

**Adaptation and Resiliency:** Takoma Park will address stormwater management, tree protection and planting, green space protection, and greenhouse gas capture and sequestration, as our authority and resources will allow.

**Electricity:** City Council will make a declaration of intent to establish a City of Takoma Park electric utility or join a Community Choice Energy (CCE) program with Montgomery County or other municipalities. Specific requirements to include acceptable sources of renewable electricity and cost competitiveness. City Council has already supported state legislation to allow this program.

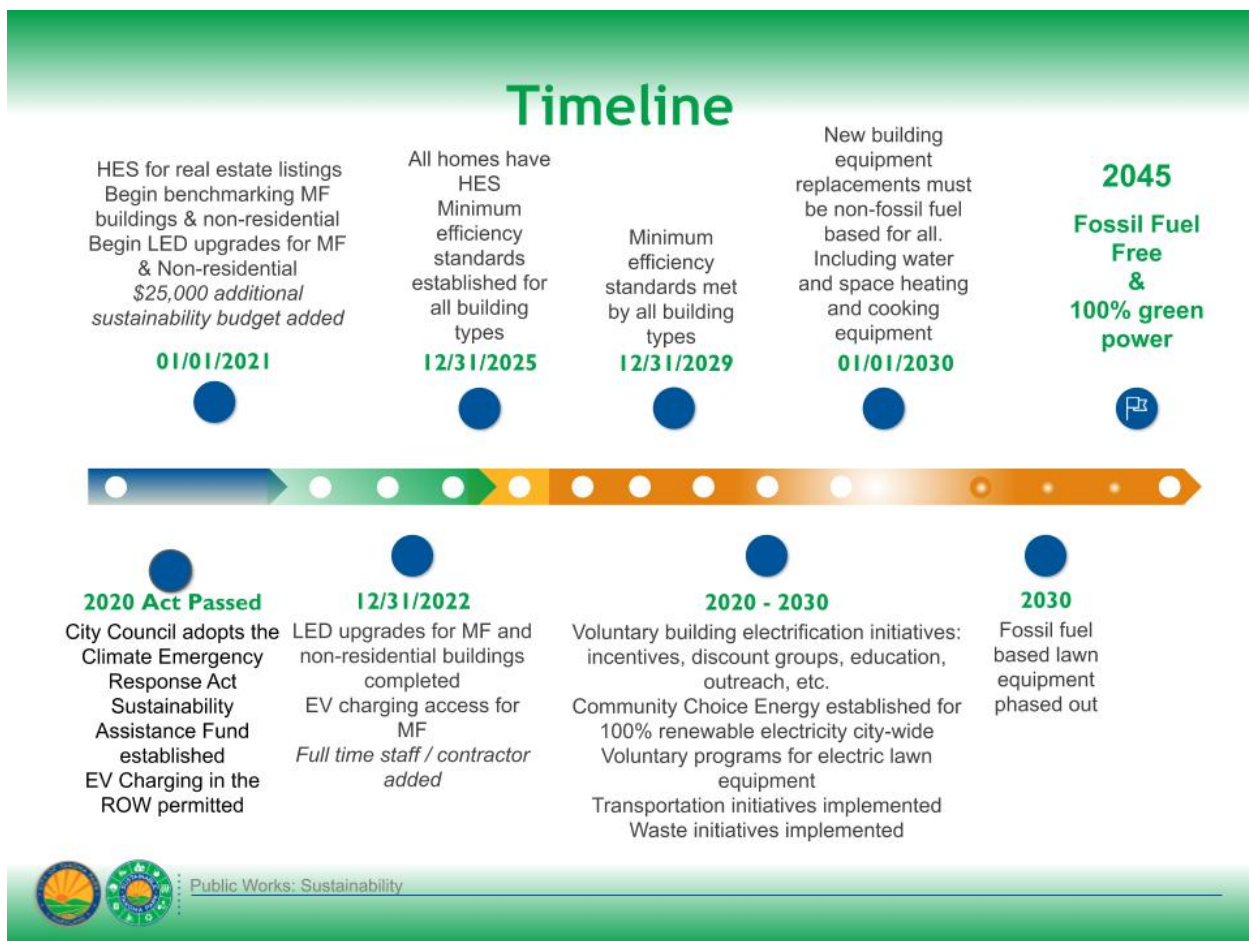
*Precedents:* Eight states currently allow CCE at the local level.

**Fossil Fuel Sales:** All fossil fuel sales including gasoline, diesel, heating oil, and natural gas delivered via pipeline will be eliminated by 2045, beginning with replacements of water and space heating equipment.

All heating and water heating equipment city-wide will need to be replaced with non-fossil fuel units. This will need to be phased in slowly with voluntary incentive programs between 2020 – 2030.

Beginning in 2030 replacements of water heating and space heating equipment will be required to be non-fossil fuel based. By 2045 all equipment should have exceeded its natural useful life and have been replaced. Gas stations by 2045 will need to be converted or relocated outside the City boundary. This timeline takes into account the extreme financial burden this may cause, and works within the natural replacement cycle of major equipment. However, many people use equipment decades longer than expected, and financial assistance and financing mechanisms will be necessary. Resiliency considerations include building capacity for back-up battery-based power. Cost to average home owner to purchase a new water heater, heating equipment, and stove \$15,000 - \$25,000.

*Precedents:* Berkeley has banned natural gas in new construction. Bellingham, WA council is exploring requiring all homes to electrify their heating. Takoma Park would be the first in the nation to ban the sale of all fossil fuels.



1 Introduced by:  
2

3 **CITY OF TAKOMA PARK, MARYLAND**  
4

5 **RESOLUTION 2020-**  
6

7 **2020 CLIMATE CHANGE EMERGENCY RESPONSE ACT**  
8 **FROM NUCLEAR FREE TO FOSSIL FUEL FREE**  
9 **TO BUILD A HEALTHY AND LIVABLE COMMUNITY FOR ALL**  
10

11 WHEREAS, the City of Takoma has been a Nuclear Free Zone since 1983; and  
12

13 WHEREAS, the City declared a Climate Emergency on March 13, 2019 via Resolution 2019-  
14 15; and  
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16 WHEREAS, the City adopted the goal of 100% reduction of greenhouse gas emissions by  
17 2035; and  
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19 WHEREAS, climate change is already inflicting, and will continue to inflict, substantial  
20 damage to our physical, social and economic well-being; and  
21

22 WHEREAS, this damage, such as an increase in stormwater runoff and extreme weather,  
23 will continue to worsen without immediate significant action; and  
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25 WHEREAS, communities, neighborhoods and residents most vulnerable to climate impacts  
26 tend to be the least prepared to manage and recover; and  
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28 WHEREAS, a greenhouse gas emissions inventory has identified residential and commercial  
29 buildings as the largest contributing sources in Takoma Park; and  
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31 WHEREAS, Takoma Park strives to be a leader in responding to the challenges of climate  
32 change and in reducing greenhouse gas emissions through our many local policies  
33 and actions; and  
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35 WHEREAS, City Council directed staff to identify the most aggressive local actions its  
36 authority and resources will allow, along with cost estimates and benefits of these  
37 actions; and  
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39 WHEREAS, City Council also directed staff to identify steps the City can take to move rapidly  
40 toward net zero greenhouse gas emissions by 2035, including near term  
41 implementation steps and achievable interim goals and dates.  
42

43 NOW, THEREFORE, BE IT RESOLVED THAT the City of Takoma Park will create and adopt  
44 the “2020 Climate Emergency Response Act – From Nuclear Free to Fossil Fuel Free to Build a  
45 Healthy and Livable Community for All.”  
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1 BE IT FURTHER RESOLVED THAT the City of Takoma Park calls on, and will continue to  
2 advocate for, more aggressive action on climate change, mitigation and adaptation at the county,  
3 state and federal levels, to move rapidly toward net zero greenhouse gas emissions, and will  
4 coordinate city climate actions with Montgomery County’s existing and proposed actions to the  
5 extent feasible; and

6  
7 BE IT FURTHER RESOLVED THAT the ordinances and policies required to implement the  
8 following main components of an aggressive climate action plan shall be prepared for Council  
9 consideration and action:

- 10  
11 1. Requiring all non-residential buildings with 1,000 square feet or more to benchmark  
12 using EnergyStar Portfolio Manager (or equivalent) no later than December 31, 2025.  
13
- 14 2. Requiring the establishment of minimum energy efficiency standards for non-residential  
15 buildings of 1,000 square feet or more December 31, 2025, with compliance no later than  
16 December 31, 2029.  
17
- 18 3. Requiring multifamily residential buildings with 20 or more units to benchmark energy  
19 use using EnergyStar Portfolio Manager (or equivalent), no later than December 31,  
20 2025.  
21
- 22 4. Requiring the establishment of minimum energy efficiency standards for multifamily  
23 residential properties over 20 units by December 31, 2025, with compliance no later than  
24 December 31, 2029.  
25
- 26 5. Requiring a Home Energy Score for all homes for sale, with phase-in to begin with new  
27 real estate listings January 1, 2021  
28
- 29 6. Requiring a Home Energy Score for all homes to be done no later than December 31,  
30 2025.  
31
- 32 7. Requiring the establishment of a minimum Home Energy Score for all homes December  
33 31, 2025, with compliance no later than December 31, 2029.  
34
- 35 8. Requiring all multifamily residential buildings with parking lots to install accessible  
36 outlets for vehicle charging no later than December 31, 2022.  
37
- 38 9. Amending the City Right of Way Permit process so as to allow for the installation of  
39 curbside electric vehicle charging equipment.  
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- 41 10. Requiring LED upgrades, with specific guidelines, in all residential rental, commercial  
42 and non-residential properties no later than December 31, 2022.  
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- 44 11. Fully implementing the Montgomery County Bikeways Plan within the City of Takoma  
45 Park.  
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- 1 12. Increasing the number of bus shelters by 12 no later than December 31, 2022.
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- 3 13. Preparing an ordinance requiring establishment of food waste collection for composting
- 4 for all single family, multifamily and commercial properties once sufficient capacity is
- 5 available.
- 6
- 7 14. Eliminating use of fossil fuel-based lawn care equipment no later than December 31,
- 8 2029.
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- 10 15. Establishing a 100% renewable electricity community choice aggregation alone or with
- 11 another entity when Maryland HB 730, or equivalent, passes.
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- 13 16. Eliminating all fossil fuels sales within the City of Takoma Park no later than December
- 14 31, 2045.
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16 BE IT FURTHER RESOLVED that all components of the “2020 Climate Emergency Response  
17 Act – From Nuclear Free to Fossil Fuel Free to Build a Healthy and Livable Community for All”  
18 shall include appropriate equity considerations, alternative compliance pathways, and/or  
19 exemptions; and

20  
21 BE IT FURTHER RESOLVED THAT as individual components are being considered through Code  
22 changes, Ordinances, Resolutions and other actions, the City Council will seek specific  
23 implementation details and cost information; and

24  
25 BE IT FURTHER RESOLVED THAT the City of Takoma Park will address local actions for  
26 climate adaptation and resiliency, such as stormwater management, tree protection and plantings,  
27 green space protection, reduction of the number of personal vehicles, and greenhouse gas capture  
28 and sequestration, as our authority and resources will allow.

29  
30 Adopted by the Council of the City of Takoma Park this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

31  
32 Attest:

33  
34  
35 Jessie Carpenter, CMC  
36 City Clerk